



# UNITED STATES PATENT AND TRADEMARK OFFICE

CP

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,570	05/16/2001	David Chalmers Schie	023P2328	4094
23504	7590	02/27/2004	EXAMINER	
WEISS & MOY PC 4204 NORTH BROWN AVENUE SCOTTSDALE, AZ 85251			VY, HUNG T	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/859,570

Applicant(s)

SCHIE, DAVID CHAIMERS

Examiner

Hung T Vy

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 18-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 and 28 is/are allowed.
- 6) ☒ Claim(s) 12, 18-20, 23-27, 29, 30, 33, 34, 37-43 and 45-50 is/are rejected.
- 7) ☒ Claim(s) 13-15, 21, 22, 31, 32, 35, 36 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
PAUL IP  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In response to the amendment filed on 01/12/2004, claims 1-15 and 18-50 are pending in this application.

### **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

Claims 12, 18-20, 23-27, 29-30,33-34, 37-43 and 45-50 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Taguchi et al., U.S. patent No. 6,345,062.

Regarding claims 12, 23, 29-30,33-34, and 37-43,45-50, Taguchi at al. discloses a circuit for controlling a laser diode (150), comprising: a bias circuit (110 or 208) coupled to said laser diode (140) for setting a DC operating point of said laser diode; an

Art Unit: 2828

amplifier (105 or 205) having an output coupled to said laser diode (140 or 320) for superimposing an AC signal on said DC operating point, wherein said amplifier has a control input for controlling a maximum output swing of said amplifier (See column 13, line 66-67 and line 14, line 1-6); a control circuit (402 and 405) coupled to said control input for setting said maximum output swing; circuit have an adjustable response whereby a transition time of said AC signal may be adjusted ( Pulse generate 211), it is inherent that Taguchi et al. discloses a programmable memory coupled to said control circuit for storing values for controlling said maximum output swing because Taguchi et al. discloses a data bus and address bus (See fig. 11). The integrated circuit, further comprising: a control circuit (402 and 405) coupled to a third one electrical connections for coupling an output of an external modulation amplifier for supplying an AC modulating signal to said laser diode (140 or 320) through a fourth one of said electrical connections, said control circuit having an adjustable response whereby a transition time of said AC signal may be adjusted (See column 7, line 46-60 and fig. 3); a bias circuit (110) coupled to said laser diode (150) for setting DC operating point of said laser diode (150), said bias circuit having a power supply input coupled to a power supply rail; a voltage reference coupled to said power supply rail for biasing a monitor diode optically coupled to said laser diode (See fig. 10).

Regarding claim 18-20, Taguchi et al. discloses second amplifier (106) (See fig. 1-10).

With respect to claims 10, 11, and 24 -27, the methods of operating a laser are considered as product by process steps.

### **Allowable Subject Matter**

3. Claims 1-11, 13-15, 21-22, 28, 31-32,35-36,44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, since the prior art of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Urakami et al., taken individually or in combination, do not teach the claimed invention having **a digitally programmable current source** comprises: a plurality of current sources, a plurality of switches, a shift register and having **programmable capacitor array** comprises: a plurality of capacitors, a plurality of switches and shift register.

Claims 1-6, 9-10, and 28 would be allowed. (if rewritten to overcome the rejection under 35 USC § 112 and to include all of the limitations of the base claim and any intervening claims)

### **Response to Arguments**

4. Applicant's arguments filed on 07/27/2003 have been fully considered but they are not persuasive. Applicant made the following arguments:

- a. "There is no control of the rise and/or fall times of the modulating signals in either Figure 3 nor Figure 10 of Taguchi" page 24, second paragraph.

Art Unit: 2828

- b. "None of the other embodiments of Taguchi provide a monitor diode voltage **reference** bias circuit " page 26 first, full paragraph.

In response to Applicant's argument **a** above, the applicant's argument is not persuasive because on fig. 9, Taguchi discloses the OSC (204) and level shift (108) control the of the rise and/or fall times.

In response to Applicant's argument **b** above, the applicant's argument is not persuasive because the applicant's argument is not corrected. On Fig. 10, Taguchi shows monitor diode 232 is connected to voltage reference 203. Therefore, Taguchi discloses all limitation of claims.

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**6.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung VY whose telephone number is (571) 272-1954.

Art Unit: 2828

The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (571) 272-1941. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hung T. Vy  
Art Unit 2828

February 20, 2004



PAUL IP  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800